

There is always a trade-off between risk and expected return. *Ceteris Paribus* (all else equal), in order to decrease your risk, you must decrease your expected return. Likewise, in order to increase your expected return, you must take on greater risk.

The great insight of **Modern Portfolio Theory** was that some groups of investments dominate others in terms of both risk and return—they offer a higher return and lower risk. This can be achieved through diversification. A portfolio of multiple investments can offer the same expected return as the individual investments, while offering lower risk than any of them. This is because the returns on the different investments are not perfectly correlated. The lower the correlation between the investments, the greater the level of risk reduction diversification offers.

It is important to note that there is a reason the rational individual will be risk-averse in most cases: risk reduction has value. The nature of compound returns is that volatility reduces long-term returns. Given two portfolios with the same expected return, the one with less volatile returns will tend to have greater value over the long-term.